Colorado ARC

ARCHITECT

BUBLICATION OF ALA COLORADO



AIA COLORADO AIA COLORADO NORTH AIA COLORADO SOUTH AIA COLORADO WEST AIA DENVER FEBRUARY 1998

[contents]

page 5
PAGE 7
page 11
page 13

President's Letter	page 2
AIA Contract Documents	PAGE 3
Continuing Education	page 4
LKA Partners Profile	page 5
COBRA Winners	page 9
Abo•Copeland Profile	page 11
West Chapter Awards	page 14

You and Your CADD Files

onald A. Bertram is a practicing attorney and a licensed architect with the firm of Bertram & Associates located in Denver, Colorado. Mr. Bertram is experienced in all aspects of design, construction and business law.

At the dawn of the computer age, the rally cry was "computers, and especially CADD for architects, are going to make our lives easier and more productive, giving us more leisure time." We all know this has not happened.

There have been some unintended consequences of this computer revolution. One major area of concern is owners, contractors and subcontractors requesting, instead of prints—copies on a disk (electronic/digital data file) or even transmitting the files by electronic transmission—by modem. on disks can be altered by the receiver. There are presently no mechanisms available to prohibit this.

An architect's drawings and specifications (the instruments of service) and actual design in whatever media, paper or electronic, are copyright protected property of the architect.

The owner has the right and the expectation to receive these instruments of service. However, the use of these must be clearly understood and set forth in the O-A Agreement—AIA B141-1997, Article 1.5—"Scope of Services and other Special Terms and Conditions" is appropriate to set forth that the owner can purchase these instruments of service in electronic/digital media at a specified price; provided, owner has executed a separate Electronic/Digital Media License Agreement (see below). -Donald A. Bertram, Esq., AIA

Another situation that is becoming more prevalent is the request from a subcontractor or material man for certain portions of the Contract Documents on a disk. From the sub's point of view, this can save him/her time and money in preparing shop drawings, and is not unreasonable.

If the O-A Agreement in AIA B141-1997, Article 1.5 sets forth that such request must be directed through and approved by the owner, a specified fee can be established for such files and that the owner agrees to pay the architect. The owner can recover the fee from the sub. There must be a provision that the sub must execute the Electronic/Digital License Agreement.

Many times the owner will request an electronic/digital copy of the Contract Documents for facilities management. Many times the documents for construction are not suited for such purposes. The architect can provide a true service to the Owner, by negotiating for an additional fee, a specific criteria for facilities management set and including it in the deliverables.

The Electronic/Digital License Agreement (EDA) must set forth, among other things, that it is a license to be used for reference only, this is not a sale. Architect retains all rights, no sub-licenses allowed. Architect does not warrant the accuracy, duplicating for use other than this project is prohibited and the data may not be compatible.

Electronically transmitted files and files

The Home Front to Feature Architect's Choice

he idea—to showcase outstanding residential design by architects —has been a longstanding success in other cities. Now, the *Rocky Mountain News* and AIA Colorado have teamed to feature architectural designed residential projects at least once a month through a new feature called "Architect's Choice" in the Sunday edition of the Home Front section. The Rocky Mountain News on Sunday has a circulation of 416,000 along the Front Range.

The Home Front is a 20- to 24-page section in the *Rocky Mountain News* that focuses on upscale home design, home furnishings, entertainment and lifestyles topics. Home Front is unique in the Denver newspaper market. Its content is patterned after national shelter magazines, with a heavy emphasis on features and color photographs of metro Denver homes,

	Architect's Choice
Request for binder and rules (non-members	(fax or mail this form). Entry fee: \$50 members, \$75
Firm Name:	
Contact:	
Mailing Address:	
Phone:	Fax:
Method of Payment:	
Check made payable to Al	A Colorado
Visa or MasterCard	
Card number:	
Exp. date:	Name on card:
Signature:	

ranging from renovated lofts to remodeled ranches to new concrete construction.

So how do you get to be on the cover story of The Home Front...? AIA Colorado is hosting a competition where the winners will be featured in the *Rocky Mountain News* throughout 1998, one per month. The competition is open to all licensed architects in the state of Colorado. The fee to enter for AIA members is \$50 and \$75 for non-AIA members. Architect's Choice guarantees publicity to the winners and *The Rocky Mountain News* is read by a diverse group of people.

See CHOICE on page 15

By providing CADD files to the owner, the architect can provide the client an invaluable service, provided the architect takes the necessary precautionary steps, which include a License Agreement and making and keeping an electronic as well as a hard copy of each set provided.

(This article was written to provide general legal information intended to be accurate although not comprehensive. Accordingly, readers are urged to consult their attorneys for any specific legal advice they many need concerning the subject matter of this article.)

1998 Board of Directors

PresidentRon Abo, AIA President-Elect. Ned White, AIA TreasurerDean Ibsen, AIA Treasurer-Elect..Saundra Spaeh, AIA SecretaryLisa Haddox, AIA Past President .. Steven Walsh, AIA DirectorStephen Loos, AIA DirectorDuane Boyle, AIA DirectorSuzannah Reid, AIA DirectorJ. Michael Jacoby, AIA Assoc. Dir.Sarah Meskin, Assoc. AIA University Dir...Dean Patricia O'Leary, AIA Executive VP Joseph Jackson, Assoc. AIA

Colorado Architect is the monthly publication of AIA Colorado, AIA Colorado South, AIA Denver, AIA Colorado North and AIA Colorado West, and is provided as a benefit to members. Submit your article by mail, fax or e-mail (aiadenco@aol.com). Deadline for all newsletter material is the 1st day of each month previous to publication. Submissions are edited and published as space allows. Letters to the editor, suggestions, comments and encouragement are welcomed. Expressed opinions and statements in this newsletter do not necessarily represent the opinions of the AIA Colorado Board of Directors or its membership.

Editorial Board

Ron Abo, AIA, Colorado Chapter Duane Boyle, AIA, South Chapter Skip Doty, West Chapter Joseph M. Jackson, Assoc. AIA Kim Jackson, The Newsletter Group Michael Jacoby, AIA, Denver Chapter Isabelle Matteson, PA, Marketing Consultant Jim Paull, AIA, Denver Chapter Rebecca Spears, AIA, North Chapter Jonathan Stern, *Colorado Real Estate Journal*

Publisher The Newsletter Group

Colorado Architect Editorial

1998: Beginning of a New Era

C Restructuring," "reunification," "the unified AIA in Colorado:" we have all heard these various terms used to describe the journey to consolidate the AIA Colorado and AIA Denver offices into one, and to provide staff support to the previously unstaffed North, South, and West Chapters.

We have made great strides in accomplishing our goals. Joe Jackson, Assoc. AIA was hired to direct AIA Colorado. Joe was previously on the staff of AIA California and brought with him the knowledge and professionalism of a large state AIA chapter. daphne r. scottmonroe, Assoc. AIA was hired to direct AIA Denver. daphne was trained as an architect and worked previously with non-profit groups. Both Joe and daphne brought a new degree of professionalism to the AIA offices.

Together they developed the new staffing and budget model to provide centralized staff support to all the local chapters. This plan will be implemented in 1998. Unfortunately, daphne will not be with us to see this model through. She will be pursuing other professional interests. We thank her for her efforts in a very challenging year for AIA Denver, and wish her the best in her new endeavors.

This year will be a pivotal one for AIA in Colorado. The restructuring model is still evolving. Our work is far from over in terms of working out the details of the reunification, and I am calling for the support of all AIA members across the state to help make this succeed. We should be approaching the restructuring with a positive attitude and with the conviction that it can and will work. We need to constantly reaffirm our conviction that what we are doing is providing a greater level of support to each and every AIA member in Colorado. All this will not happen without some pain and misgivings, but if we keep our intentions high, we will be able to work together to find the right way.

By the time this newsletter goes to press, AIA Colorado will have had its board retreat on January 24. I have asked all the local chapter representatives to come to the retreat with a list of concerns for the coming year in terms of staff support and the restructuring model. I am committed to addressing all concerns in an open and thoughtful manner. We will probably not resolve all of the issues immediately, but hopefully we will establish a process by which all the issues can be addressed and resolved.

I am confident that by this time next year we will be a stronger and more unified organization than we are now, but we cannot do it without the support of our members. If any of you have any questions, concerns, or just want to talk about it, please call me at 303.830.0575, write me at Abo•Copeland Architecture, Inc., 1600 Downing Street, Suite 700, Denver, Colorado 80218, or e-mail me at rka@acarch.com.



-Ron Abo, AIA

CPI Conference

ow should deteriorating masonry be repaired? When do you replace versus repair windows? What are new substitutes for historic roofing materials? These and other preservation topics will be presented at Colorado Preservation, Inc.'s statewide conference, "Saving Places: Preservation Strategies for the 21st Century" on February 6-7, 1998. "It's an excellent opportunity for architects to learn the technical aspects of historic preservation, which is an evergrowing percentage of today's client base," says architect, Nan Anderson, president of CPI. The Conference, cosponsored by AIA Denver, will be at the Denver Athletic Club. Early registration is encouraged. Call CPI at 303.893.4260. We'll see you there!

Denver

1660 Seventeenth Street Suite 101 Denver, CO 80202 (303)-623-4927 Fax (303)-623-6602

Vail

70 Benchmark Rd. Suite 204 P.O. Box 1597 Avon, CO 81620 (970)-949-7768 Fax (970)-949-4054

Guy's Floor Service has made excellence our standard for more than 50 years. For the best in commercial carpet, tile, wood and resilient floors. (303) 623-4191 GUY'S FLOOR SERVICE INC. ZO50 West 9th Avenue Denver, Colorado 80204 (303) 623-4191 Fax (303) 623-4820 Structural Engineers Serving All Of Colorado

Calendar March through August '98

March April May June July August Green Architecture Houses Architects Live in Partnering on Projects Summer Vacation Public Artchitects Back to School

Letters, articles and comments are always welcome. Submit your information by mail, fax or e-mail: AIA Colorado, 1526 15th Street, Denver, CO 80202, 303.446.0066 (fax), aiadenco@aol.com (e-mail). Web site: www.aiacolorado.org



Next Generation of AIA Contract Documents

n October, The American Institute of Architects published updated versions of its Owner-Architect Agreement (B141) and the General Conditions (A201) to its Owner-Contractor Agreement. These contract documents are intended to provide the basic framework for the traditional owner-architect and owner-contractor relationships on typical design-bidbuild projects.

Given the AIA's proven track record, the new documents are expected to receive wide acceptance even though they include controversial changes, which could have a dramatic impact on the relationships of the parties.

For over a century, the AIA contract documents have established construction industry standards throughout the country. No other set of forms has done more to define the roles, rights, and responsibilities of project owners/ developers; design professionals; contractors; and subcontractors involved in private construction projects.

The last changes to B141 and A201 were made in 1987, and the AIA has published its new documents in hopes of balancing and allocating project risks more fairly among the parties. While there already has been considerable debate, only time will tell whether the AIA has been successful creating new standard-form documents useable nationwide, which will help keep projects on solid financial footing and reduce the likelihood of litigation.

A201, General Conditions to the Owner-Contractor Agreement, is the most widely used set of general conditions in construction contracts for private projects in the United States. It has done more than any other contract document to set the rules for construction projects.

The most controversial change in new A201 is a provision which attempts to delegate certain design responsibilities to contractors. This change reflects the concerns of architects who do not want to be responsible for design details typically prepared and performed by contractors and suppliers, as well as architects' desire to have contractors and suppliers hire qualified, licensed professionals to prepare or review and seal highly specialized shop drawings and other submittals.

A divided Board of the Associated General Contractors of America has endorsed new A201. A good argument can be made the controversial design delegation provision merely recognizes what has been happening for years on most private construction projects.

Other significant changes to A201 address: Waiver of consequential (not direct) damages, other than liquidated damages, by owner and contractor. This change has been referred to as "Tort Reform," which is intended to prevent owners and contractors from stating claims for speculative damages arising from risks of loss that were not bargained for by the parties.

Mandatory, nonbinding mediation as a condition precedent to binding arbitration or mechanics' lien litigation. This provision is intended to greatly reduce the likelihood of protracted arbitration and litigation proceedings. However, it doesn't provide for the joinder or consolidation of claims by owner against architect for purposes of the mediation process between owner and contractor, absent the consent of the parties.

Termination of the construction contract by owner for convenience. This change is expected to standardize an accepted industry practice which allows termination by owner without cause, but with reasonable compensation to contractor.

Deletion of architect's "observation" of work. This concept has been eliminated from all new AIA documents and is being replaced with an "evaluation" concept. No "supervision" of the work is required by architect. -Gene Commander, PA, Hall & Evans, L.L.C.

Remediation of hazardous materials. Procedures will address unsafe materials in addition to asbestos and PCBs.

Correction of the work. Contractor's contractual one year correction responsibilities are differentiated from contractor's contractual express warranties, which extend beyond one year from the date of substantial completion. Changes in the work. The procedures and the responsibilities of owner and contractor for making changes have been clarified.

Payments. Procedures regarding progress payments, payments to subcontractors, payments not in dispute under construction change directives, and reduction of retainage have been clarified. Projects involving multiple dates of substantial completion have also been addressed.

See CONTRACTS on page 15

LETTERS POLICY

The Colorado Architect welcomes all letters. Letters must be signed with name, street address and daytime phone number. The opinions expressed do not necessarily represent the opinions of the AIA Colorado Board of Directors or its membership.







303 | 750 | 8200 www.coloradohardscapes.com

CUSTOM HARDSCAPE APPLICATIONS

- Staining
- Bomanite
- Custom Finishes
- Form Liner Wall System
- Custom Rock
 Water Features



"Quality Makes a Lasting

Impression...with Custom Concrete finishes that offer

durability and low

maintenance as well as a

wide variety of textures,

colors and designs."

Adaptec, Longmont

Building on Success

5775 Flatiron Parkway, Suite 115 Boulder, Colorado 80301 (303) 440-4220 *Phone* (303) 440-4256 *Fax*



C.D.P.H. & E at Lowry Air Force Base, Aurora

Boulder • Cedar Rapids • Des Moines • Kansas City • San Diego

CONTINUING EDUCATION OPPORTUNITIES

The 48th International Design Conference in Aspen

It's not about Sports Designing within rules Designing and bending the rules Simulation, imitation and deception Improving performance with new forms and materials Designing for disabilities and capabilities

The formal design of festivals Forms for ritual and tradition The ethics of designing the body The aesthetics of athletics Better performance with better theory Failure and success in design Designing instruments of measurement Designing the sports landscape The street as a playing field Keeping geese off the golf course Designing body cover for speed and protection

Sports clothing, street and everyday fashion Innovation and design Designing symbols for brand recognition and product loyalty Experience and substitution The shock of the new. It's about Design.

These and other design issues will be explored by product designers, architects, sports analysts, writers, scientists, coaches, graphic designers, media and marketing executives, city designers, photographers, interior designers, software designers, athletes and others. They come to think about what's next. They come because design matters. And they come because the International Design Conference in Aspen is just what its name implies: international in scope; about design rather than about designers; a conference, not a convention; and held in a setting marvelously suited to the practice of thought and vision. In Aspen. In a new conference format. June 3 to 6. To register or for more information, please call 970.925.2257.

J.B. Jackson and American Landscape Conference

The University of New Mexico School of Architecture and Planning will be hosting this conference October 2-4, 1998 in Albuquerque. The conference will provide a unique opportunity for an interdisciplinary assessment of the future of cultural landscape studies, in addition to an evaluation of Jackson's ideas and impact.

The concept of landscape pioneered in the 1950s by Jackson, who died in 1996, encompasses the entire range of environments shaped by humankindmanicured as well as wilderness parks, high style design, vernacular building types, and roadside neon signs, field systems, town plans, and vacant lot games of tag. Jackson's conceptions of culturally-constructed space continue to echo throughout our society in terms such as townscape, streetscape, and netscape.

The conference has also been structured to provide opportunities for participation in open paper sessions, small group and panel discussions. The organizers encourage the submission of paper proposals on Jackson and his influence, on the applicability of cultural landscape concepts to contemporary design, and on the future of landscape studies, as well as original studies of historic or contemporary cultural landscapes.

An optional field trip will visit some of the first cultural landscapes Jackson explored, including his home village of La Cienega, as well as the kind of exuberant contemporary developments he relished in the Intel-driven company boom town of Rio Rancho.

One-page paper proposals for talks of 15 to 20 minutes should be sent by April 15, 1998 to the address below. Conference organizers Stephen Schreiber and Chris Wilson of UNM, and Paul Groth of the University of California-Berkeley, will serve as the paper selection committee. For conference information contact Stephen Schreiber, Director of Architecture, School of Architecture and Planning, University of New Mexico, Albuquerque, NM 87131. Email: schreib@unm.edu. Phone 505.277.2053. Fax 505.277.0076.

Selling Services Abroad Conference

More American service companies are looking for opportunities in foreign markets. They feel they must expand in order to grow and even to survive in some cases. However, they often lack the knowledge and expertise that they need to be successful. The World Trade Center Denver Educational Services is offering a one-day program, "Selling Services Abroad," which will address many of the critical success factors.

Date: Friday, March 20, 1998 Time: 8:15 a.m. - 4:00 p.m. Location: Top of the Rockies (formerly The Petroleum Club), 555 17th Street, 37th Floor Presenters: Mr. Howard Schirmer,

Presenters: Mr. Howard Schirmer, Transnational Associates, Inc.; Mr. Timothy McCune, 2MS Inc. Cost: WTC members \$125.00/Non-WTC members \$155.00. Includes continental breakfast, lunch, and handout materials.

For more information, call WTC Educational Services at 303.592.5364.



Clean, safe, economical natural gas. Because the best decisions are the ones that make your company money.

WHEN YOU'RE RUNNING A BUSINESS, YOU'RE MAKING A LOT OF IMPORTANT DECISIONS ABOUT COSTS.



BUT WHAT YOU'RE REALLY LOOKING FOR IS VALUE. AND THERE'S NO BETTER ENERGY VALUE THAN CLEAN, SAFE, ECONOMICAL NATURAL GAS.

NATURAL GAS SAVES MONEY. AND WITH A SUPPLY THAT IS 70 YEARS AHEAD OF DEMAND, YOU'LL KEEP SAVING MONEY FOR YEARS TO COME.

NATURAL GAS HELPS YOUR COMPANY STAY IN COMPLIANCE WITH AIR POLLUTION STANDARDS. IT ALSO MAKES A STRONG STATEMENT ABOUT YOUR COMPANY'S ENVIRONMENTAL RESPONSIBILITY.

NATURAL GAS IS A DOMESTIC FUEL, AVAILABLE IN PLENTIFUL SUPPLY RIGHT HERE IN THE ROCKY MOUNTAIN REGION. IT HELPS OUR LOCAL ECONOMY AND REDUCES OUR NATION'S DEPENDENCE ON FOREIGN FUELS. WE'RE COLORADO INTERSTATE GAS COMPANY. WE TRANSPORT NATURAL GAS HERE IN THE WEST. AND WE ENCOURAGE YOU TO TAKE A GOOD LOOK AT HOW OUR PRODUCT CAN FUEL YOUR PROFITS.



Colorado Interstate Gas Company A SUBSIDIARY OF THE COASTAL CORPORATION



Lines & Columns South Chapter

AIA Colorado South Chapter **1998 Board of Directors**

PresidentDuane Boyle, AIA President-Elect .. Richard Higgins, AIA Past President Gregory Friesen, AIA SecretaryGeorge Cruz, AIA TreasurerJohn Goodloe, AIA Director Michael Collins, AIA Director Michael Cook, AIA Director Douglas Hahn, AIA DirectorMarvin J. Maples, AIA DirectorMartin Stumberg, AIA Assoc. Dir.JoEllen Thiel, Assoc. AIA

New Members

Mark Beavers, AIA

CSNA PROJECT PROFILE

Project: Campus Housing Village, University of Colorado at Colorado Springs

Project Architect: CSNA Architects, with Anderson Mason Dale, PC Consulting Team: Civitas, Inc. (Site Planning), Kiowa Engineering (Civil), Howard C. Dutzi & Associates, Inc. (Structural), McFall, Konkel & Kimball (Mechanical), Consulting Engineers, Inc. (Electrical), Thomas Ricca Associates (Foodservice Consultant), Thomas & Thomas (Landscape Design) Contractor: Gerald H. Phipps, Inc. Date of Completion: Phase 1, 1996; Phase 2, 1997

Project Size: 170,000 GSF, 600 students

Construction and major materials: Stucco on masonry (main building materials). Bar joist floor and roof system at the Food Service Building to gain Long Spans of Open Space. Precast Floor Structure with Topping Slab. Standing metal seam panels on steel studs (links between buildings). Poured-in-place concrete for foundation. Stucco at exposed areas. Precast bridges with ornamental steel guardrails connecting buildings. Colored concrete tile roofs. Built-up roof system. Concrete pavers at second floor patio at Food Service Building.

The Campus Housing Village project at the University of **Colorado at Colorado Springs**

The Campus Housing Village project at the University of Colorado at Colorado Springs (UCCS) is the first residential



project for that campus. It is a two-phase, multiple-building project whose major components include residential living quarters and floor lounges for 600 students, a dining and banquet hall, a living/learning center, which doubles as conference space for summer use, and full administrative support. Residential liv-

LKA PARTNERS PROFILES School Designs in **JEFFERSON COUNTY**

Project Type: New Elementary School Client Name: Jefferson County School District R-1 Completion Date: July 1996 Project Size: 52,600 square feet Construction and Major Materials: Exterior walls are constructed of patterned split faced concrete masonry unit veneer on metal studs with incorporation of brick bands and porcelain tile accents. All sloped roofs are covered with standing seam metal roofing. DeliveryProject Method: Bid to Pre-Qualified Contractors

pedestrian and bicycle traffic from adjoining neighborhoods could easily access the school without dealing with vehicular traffic.

The desire of the DAC to group the classroom instructional areas in three distinct neighborhoods influenced the overall shape of the building. Each neighborhood contains eight classrooms, a teacher's work room and educational materials storage room, and toilet facilities. At the educational core of the building, surrounded by class-



Design Program

Through a Design Advisory Committee (DAC) process, Jefferson County School District R-1's educational specifications for elementary schools was adapted to accommodate the needs of this neighborhood, which has seen a surge in population transitioning from a rural "estate residential" locale to a densely developed suburb. The design of the 52,600 square foot school, as envisioned by the DAC, was to provide an environment that cultivates curiosity and stimulates creativity in each student. The kindergarten through sixthgrade facility had to be capable of accommodating the extended "school family" of child, teacher, parent, and community in a setting that could easily adapt to future changes in technology and educational philosophy.

Design Process

room "neighborhoods," are the computer instruction classroom, art room, library media center and LMC's support functions. The three neighborhoods are linked by a major loop circulation system, conceived as a "pleasant street between tasks," and is more than just a hallway. The "Loop Street" merges into "Main Street" at the Galleria. The Galleria runs through the width of the building and is an exciting place full of various spaces, views, and activities. At each end of the Galleria are the two main entrances. One is the public entrance; the other is the main access to playgrounds and ball fields. The Galleria also functions as the lobby for community events and forms a buffer between the "noisy" activity areas (music, gymnasium, dining) and the "quiet" academic areas of the building.

Distinguishing Features

ing areas were designed for various uses such as single occupancy, or double and handicap occupants in a suite. The village concept, with

The site design involved integrating and preservating mature trees and a pond. These elements, coupled with the landscape design, help to integrate the new school into the surrounding neighborhood. An existing sidewalk/ trail system throughout the site was preserved and augmented, so that

connecting "streets" and "bridges," was selected to promote a sense of community, place, and for its appropriate scale.

The exterior design reflects the feel of the Cragmoor Sanitorium, an important architectural landmark at the center of the campus. With its towers, fenestration, and use of natural materials, this building offers a pleasant contrast

The placement of the new school, site elements, and parking around the existing trees and pond created a school environment that has been well received by the community. The one-

See LKA on page 6

to the larger, more institutional academic buildings constructed in recent years. By drawing from these qualities for the Campus Housing Village, the project-although totaling over 170,000 square feet-projects a more intimate quality of life desirable in a residential project.



[LKA, from page 5]

story structure's split faced masonry units with brick band accents break down the scale of the facility for the elementary students. The media center and circulation spaces are filled with natural light from clerestories and wellplaced skylights.

Community Value

The elementary school created a transition between the established ruralestate environment and the new residential suburban development. The placement of the new school and its site elements bring together the two neighborhoods. The elementary school also provides public space that may be used by neighbors during non-school hours, both within the building (gymnasium, dining facilities, media center and music rooms), and at the play fields, play structures, and pond.

Project Type: New High School Client Name: Jefferson County School District R-1

Completion Date: July 1996 Project Size: 159,000 square feet Construction and Major Materials: Exterior walls are constructed of patterned split faced concrete masonry unit veneer on metal studs, incorporation of native stone at the entrances. Stucco on metal studs is used on the second- and third-level exterior walls. All sloped roofs are covered with standing seam metal roofing. Delivery Project Method: Bid to Pre-Qualified Contractors

Design Program

New District requirements called for a high school designed to be responsive to educational requirements challenged by the 21st century in a unique mountain community. A guiding vision for Conifer High School was a "Community of Learners and a Community Learning Center." The magnificent site, high in the Rocky Mountains, sits at over 8,000 feet. The initial capacity of the school is 1,000 students with expansion capability to 1,500. Working with a broad-based Design Advisory Group drawn from the community, a concept was developed of school organization based on "three instructional academies." Each academy contains spaces for the humanities, math, science, and technology. Traditional programs—such as business, computer sciences, and vocational programswere integrated with academic programs. Students spend a good portion of their day within the "academy" as a home base-reinforcing the desired sense of community and identity.

and recreation facilities nestle into terraces within the site slopes and are buffered, where possible, by extended fingers of the surrounding forest.

academy contains two "four-classroom clusters" with integrated small group/conference "flex spaces." This cluster organization offers unlimited



It was an important factor in the building design to take full advantage of the natural environment to develop an exciting school spirit. An atrium "Main Street Promenade" is the primary coordinating element within the building, connecting the academies grouped at the West end of the building with public spaces around the main lobby. This main street is three stories within the instructional wing and two stories around the media center and lobby. Due to the site's slope, all floors of the building have access at grade. Each academy contains a flexible grouping of eight regular classrooms, two science labs, a technology lab, computer lab, conference/breakout spaces, a teacher office/work room suite, media resource facility, special education, academic storage, and a strong orientation to the focal point atrium space. The commons is the social hub of the school, oriented to marvelous views and natural light. It can be darkened for stage performances and is equipped with sophisticated sound and light systems for drama and musical events. The building is a true "Facilitator of Learning."

The concept of flexibility presided over the entire design of the school. Each



potential for learning options: individual study; small and large groups in almost any combination, fostering opportunities for interdisciplinary learning; as well as traditional arrangements. The commons, gymnasium, and main lobby create a very grand public triad of flexible use opportunities.

Distinguishing Features

A bold, vertical articulation of the building components correspond to the mountain side site, creating an interesting stepped profile. Three instructional academies are clearly expressed and easily understood by visitors. Patterned, split faced masonry walls echo the site's natural coloration, that firmly connects the building to the ground. The total effect is one of strength, compatibility, and durability. Green metal roof forms and canopies

> integrate with the forest. Massive stone piers anchor main entry pavilions, reminiscent of historic shelters, barns, and houses found in Conifer and the surrounding mountain communities.

Community Value

The high school is a community of learners and a community learning center. The functions arranged around the main lobby encourage the community to use high-profile public spaces without jeopardizing the security of other

building areas. Instructional academies are accessed from the exterior and used for evening adult education. The Media Center is a true activity hub of the region, resulting from the partnership formed within the local library district. Red Rocks Community College uses the school as a satellite facility. Other partnerships include sharing athletic facilities with the local recreation district, an on-site resource officer from the Jefferson County Sheriff's Department, and sharing facilities and programs with Evergreen High School (located about 30 miles north). These programs substantially extend the hours of use and exposure of the school to the community.

No Wonder the Empire Lasted So Long! For breathtaking beauty and long-lasting quality, natural stone is the only choice.

Design Process

The site was carefully master planned to preserve the natural environment and separate the building from the context and high traffic of the highway. Development effectively positions the building near the high point of the property for optimized relationships with natural environment, views, and solitude, and distributes outside fields and parking on the mountain side in a manner convenient to purpose. The exterior physical education, athletic

COMMERCIAL INTERIOR DESIGN

A UNIQUE PERSPECTIVE ON PEOPLE & SPACES

MEDICAL ·OFFICE COMPLEX EDUCATION ·HOSPITALITY

IN

SERVICES

CONCEPTS ·COLOR/TEXTURE SPACE PLAN ·SPECIFYING AUTOCAD · CONSULTING FINISH MATERIALS FURNITURE

TEAMING WITH ARCHITECTURAL FIRMS WITH AN INTERIOR EMPHASIS FOR 15 YEARS

P.O. BOX 6388 COLORADO SPRINGS, CO 80934 (719) 635-7133 · FAX (719) 635-7191

more than 4,000 slabs of stone. Choose from natural marble, granite, slate and limestone, in sizes from 4" x 4" to 24" x 24", including slabs now in stock.

IYL

Take a walk through time and

tradition at IMG's NEW

showroom featuring 170

5.000 sq. ft. additional

captivating, 3,400

IMG

emational Marble & Granite

Naturally divine resources for those rich in good taste!

22-2800 • fax (303) 722-1023 • 1-800-464-2511 South Jason • Unit 8 • Denver, Colorado 80223 www.imgstone.com





LIDA

Colorado ARCHITECT



1998 AIA Colorado Denver Chapter Board of Directors

DRAWING SHORTCUTS: Merging Hand Drawing with Technology

—Jim Leggitt, AIA

🔽 took my first drawing lessons when I was five years old, courtesy of TV. L There was a program in the 1950s called "Learning to Draw," hosted by John Gnaegy. Almost daily, I faithfully placed a piece of clear vinyl over the black-andwhite screen—and then fought with my twin brother over who got to trace the televised drawings with crayons. This cutting-edge combination of technology and hand drawing was a great idea. Forty years later, I'm still working with machines to create drawings, and I'm still having just as much fun. Sometimes I draw for pure pleasure, the way I did when I was five, although most of my drawings these days are done as part of my architecture and urban design practice. I first did serious architectural drawing more than 20 years ago, when I was at Rhode Island School of Design. In an intense design school environment, nobody escapes the need for time management,



neighborhood. People, storefronts, sidewalk cafe and streetscape improvements were then layered onto the base drawing.

meeting multiple project deadlines, and producing great work with minimal time



This drawing originated from a photograph taken of four individuals during a project workshop. Once the primary figures were traced, I then added the room, tables, background people, and architectural plans.

of both worlds. You can put technology to work for you, creating accurate computerized perspective backgrounds to use in drawings, using photographs to make bases for illustrations, exploiting the amazing abilities of copiers, and finding the right tools to make your drawing process faster and your drawings more effective. By utilizing technology on your own terms, you can improve your drawing skills and even bring back the magic of drawing in the design process!

Why DRAWING SHORTCUTS are

important. Sketching and drawings generated by hand are effective communication tools that allow others to quickly and easily visualize what you design. It is just as important as ever-maybe even more important in this age of computers-to be able to capture creative ideas in the form of confident, believable hand drawings and sketches. But there are often barriers between creative ideas and the drawings that communicate them. The obstacles are most often fear of drawing, over-reliance on technology, lack of training and practice, low self-confidence, and shortage of time. Overcoming these creativity roadblocks can seem like trying to cross a bottomless abyss, but I'll try and explain to you how to make the leap.

In the words of Thomas Edison, "genius is one percent inspiration and ninetynine percent perspiration." *DRAWING SHORTCUTS* allows you to manage the necessary ninety-nine so that the vital one isn't lost for lack of trying.

The creative artist in you. Everyone is

The Rules Have Changed. The widespread desktop publishing industry has affected every publication, menu, magazine, school report, greeting card, design document, real estate brochure, and cereal box you see. Graphs, charts, color sketches, and illustrations are standard ingredients in almost any presentation. Media methods are used by everyone from elementary school students to corporate giants. The kinds of hand sketching techniques I use in *DRAWING SHORTCUTS* are geared to the demands —and opportunities—of the modern world.

Client expectations. Trends in design presentations are very different than they were twenty years ago. Clients once paid large sums of money for beautifully crafted perspective drawings of their unbuilt projects. Today, construction schedules are so demanding, budgets so tight, and design changes so frequent that an expensive investment in a detailed perspective drawing too early in the process is usually seen as an unaffordable risk. Clients are getting smarter, and are relying on quick, inexpensive drawings for the early visioning and promotion of projects.

Compressed schedules. Who has the time for anything anymore? Even television commercials, reflecting our fastpaced times, talk about "buying time." Expectations at home, in school, and in business are more demanding than they were years ago. With all this speedy equipment at our fingertips, we're being asked to produce more in less time. Even the creative process and design communication aren't immune. If we can deliver packages overnight from coast to coast, then why can't we design a building with the same efficiency?

New Members

Brad Daive, PA, Imagelabs Matthew Klak, AIA, Abo Copeland Architecture, Inc.

Jon Koenigsberg, AIA, Humphries Poli Architects Michael Mowry, Assoc. AIA Christopher Murdy, Assoc. AIA, H + L Architecture Michael Nasso, PA, Kelly-Moore Paint E.J. Olbright, PA, Colorado First Construction Co. Arlene Thompson, PA Daniel Wenger, Assoc. AIA and little or no money. It's the same today in any professional design practice, and getting more so all the time. My DRAW-ING SHORTCUTS attitude and techniques benefit art students, design professionals, and anyone else who needs to be able to communicate creative ideas through effective drawings and graphics in a fast-paced modern world.

The need for DRAWING SHORTCUTS.

Over the past decade, there have been incredible advances in computer hardware, software, and other high-tech equipment. Good old-fashioned quickly generated hand drawing, however, has suffered. No computer rendering can communicate the way a real drawing can, but many of us have lost - or never developed - the ability to draw by hand. Tve learned that you can have the best born with the ability to communicate creative ideas with drawings. Some of the best and most effective drawings come from children, before their creative spirit is damaged by the "but I can't draw" attitude that affects so many adults. Children's drawings are simple, lively, quick, and communicate only the basic concept of their vision-in short, the kind of drawings that I've been trying to recreate for years. Simplicity, character, speed, effectiveness, and ease of drawing are what DRAWING SHORT-CUTS are all about. Kids can do it, students in my drawing seminars can do it...and so can you!

"Every child is an artist. The problem is how to remain an artist once he grows up."

- Pablo Picasso

But don't panic—the shortcuts and design tips I've learned and now teach will help you cope.

Tighter budgets, thinner wallets. There's never enough money, of course, but lack of money shouldn't be an excuse for not being able to communicate your ideas. Remember, children can tell fabulous stories with just newsprint and poster paint! There are many ways to create drawings that don't require expensive markers, technical pens, or exotic

See DRAWING, on page 8



[DRAWING, from page 7]

materials. Even documenting your work can be economical. A portfolio made up of high-resolution color copies and computer-printed text costs a fraction of what it took to produce color photographs and elaborate typesetting in the 1970s.

Computer skills vs. drawing skills. The average fifteen-year-old spends more time in front of a computer monitor than watching TV. By the time they graduate from college, most architecture and graphic design students have learned computer skills that rival those of experienced professionals. We have CD ROM, multi-media, worldwide web sites, internet access, 3-D imaging, custom software, ergonomically-designed keyboards, custom screensavers, more power, greater memory, and much, much more. What's wrong with this picture? Nothing! Computers are wonderful tools, and everyone should know how to use them. At the same time, we need to be careful not to lose sight of creativity, imagination, and visual communication skills. Recent college graduates in design fields can't draw as well as they could years ago. Perhaps they simply aren't being taught or allowed to develop their ability to draw! Many people are scared to draw, fearing disastrous results and failure.

- "The people I draw look like trolls." "My cars look like shoe boxes."
- "I'm creative, but I can't draw."
- "I just don't have the time to learn to draw."

"I haven't a clue about how to draw in perspective."

"I don't have enough money for expensive drawing materials."

Sound familiar? You could probably add a few of your own to this list!

Erase Your Drawing Fears. The right shortcuts and design tips can eliminate almost any excuse for not drawing. As part of your DRAWING SHORTCUTS attitude, you can utilize the CCC's, in other words, the Camera, Copier, and Computer in your drawing arsenal of weapons. You need to also understand which combinations of materials to use so you don't have problems with smearing, and which materials to use so that you can erase mistakes if they do happen. Remember, most mistakes can be prevented or fixed. Communicating design ideas with drawings is actually easier than it was even a decade ago, because of the equipment and services that are now available. Cameras are getting less expensive and easier to use, images are sharper all the time, and photo-finishing is available in almost every grocery store and shopping mall. You can even have photos back in an hour! Digital cameras and computerbased processors can deliver color prints in less than a minute. These are all steps in the right direction, because photography is one of the best drawing shortcuts vou could ever learn.

Color copiers are getting so accurate that an original drawing and its copy appear almost identical.

Copy machines are even merging with other technologies to become "all-inone" packages—phone, fax, copy, print, and other options all in a single machine! Grocery stores, 24-hour copy centers, malls, and libraries all have copiers you can use, which is great because using a copier is a great timesaving drawing secret.



ing done by hand. But you can also use computer-generated images as templates for hand drawings, complete with character and life. Your communication skills and hand-drawing options are infinitely expanded with computers.

A three-step program. Every drawing is a three-step process. First, you must gather the data, or visual information, that you need. Then you construct the perspective and the basic framework of the drawing. Once you're comfortable with the size, layout, look, and feel of the drawing, it's time to illustrate the final drawing with linework, textures, tone, and color. Remember coloring books? The images are collected for you, the drawing is already constructed, and the fun illustrative part is left up to you. Once you know how to quickly collect date and accurately construct the framework of a drawing, all that's left is the fun of illustrating the final drawing.

Let technology do your dirty work. Everyone has an individual style of



drawing and design, a "drawing identity." A roomful of kids coloring the exact same page of a lesson book will have a wide range of unique results. But although the results are different, the basic information—or data—in each drawing is the same. The data that you use to construct a drawing should be as accurate as possible. Technology lends itself beautifully to this task. Computers can construct perspectives, a camera can record details that you want to use, and a copier can enlarge or reduce images for you to trace.

Make the best of what's available.

DRAWING SHORTCUTS covers the basics about doing your best drawings with limited resources. Take a good look around your home, school, office, art supply store, and town. Figure out what drawing materials are easily available, and which copy and photofinishing services are nearby. Do you have access to computer equipment? Make your draw-

See DRAWING, on page 10



- SBS Modified Bitumen Roofing Systems
- Zonolite[®] and Other Lightweight Insulating Concrete Roof Decks

Peter Hicks (303) 795-0713

Tearly the best

Neil Shannon (303) 987-8746

ConceptedadAn Award Winning Solution-It's going to changeAbove cliebets lookAbove cliebets lookAbove cliebets lookAbove cliebets lookAbove cliebetsAbove clieb

Discover for yourself the power, the effi- cate design ideas to clients, consultants,

Designing To Stand Out From The Crowd.



ciency, and the unlimited flexibility of 3D visualization through a new software application from Virtus Corporation— Virtus ConceptCAD.

Using ConceptCAD designers can create massing, site line, and spacial flow studies to quickly and clearly communiand coworkers. Designers and space planners have the time and flexibility to experiment and stretch their imaginations. Productivity is up, cost down, activity at a new high.

"It's impacting the way we do business" Gene Smarte, Editor-in-cheif CADALYST magazine

www.virtus.com/conceptcad

Call Avatech Solutions <u>TODAY</u> at (303)796-0204 to receive a FREE ConceptCAD demo CD!

Avatech Solutions is your provider for:

Autodesk Software Softdesk Software CAD Workstations Plotters/Printers Networking

Colorado ARCHITECT

8

Training Classes Telephone SupportLINE Hardware/Software Support Consulting Customization



AVATECH SOLUTIONS

formerly CAD-PRO Systems Integration

8101 E. Prentice Ave., Suite 300 Englewood, CO 80111 (303)796-0204 fax (303)796-7646 www.avat.com

1997 AIA Denver COBRA Award Winners

Honor Award Winner:

David Owen Tryba Architects Mayer Residence Denver, Colorado



Program: Empty double lot on a street comprised of primarily single family residences. Private bedrooms and home office. Open entertainment areas. Art gallery for private collection.

Solution: Conceived as an extension of the neighborhood street wall, the program is stretched from property line to property line as it relates to this front wall. The organization is composed in response to site and environmental conditions with respect to existing mature trees, views, and solar orientation.

The front of the house, which faces north, has minimal openings and the roof is steeply pitched to protect from winter heat loss and winds. Located at this side of the house, the two-story gallery takes advantage of the north light, supplemented by reflected southern light from the skylights. The gallery serves as an organizational and gathering area connecting the living spaces, which face south to the backyard. Extensive glazing, protected by four-foot to sevenfoot, four-inch overhangs, captures warmth and light, and extends the living and entertaining areas to the outside.

> The use of stucco, cedar, and glass in a cubist composition based on the Fibonacci series intertwine the architect's philosophy and the owner's collection and appreciation of art.

Merit Award Winners:

Bercovitz Design Granite Ridge Residence Telluride, Colorado The site on the ridge is very sensitive, in that a tall large mass would be seen from the valley floor leading to historic Telluride. The massing of the structure was designed to step down along the ridge, minimizing its visual impact to the valley below.

The views from the site are, perhaps, the best in the country. When possible, window exposures took advantage of the panoramic view. The building was designed to allow three sided viewing from most major rooms.

The structure itself is mostly log post and beam construction, using structural panels above the logs.

The interior walls were designed to give a sense of bulk and mass by using



The clients for the Granite Ridge Residence were originally after a "southwest" home, but wanted it to fit in the mountain setting. Our source of inspiration was the Grand Canyon Lodge, a stone structure that burned in 1932. Building forms common to southwestern homes were used, but with stone and log rather than stucco. double wall construction and broad plaster radii at outside corners. Plaster was used extensively to assist in giving the house strength.

Most of the light fixtures in the house were custom designed for the residence in order to be more sympathetic with the style, in both size and style. Of particular interest is the tower, which serves as the owner's office/study. The views afforded from the tower are worthy of a high admission charge. Access to the tower is possible from a four-story elevator that is hidden within a chimney form as seen from the front of the house.

Cottle Graybeal Yaw Wildcat Ranch Snowmass, Colorado

Located on a remote 500-acre ranch parcel near Snowmass, Colorado, this residential project captures spectacular views of the Rockies' high peaks and a mountain lake in the valley below. The design was guided by both the owner's



See COBRA AWARDS, on page 10



PROFESSIONAL UNDERWRITERS

PUI Agency of Colorado, Inc.

Allow Us To Deliver The Reliable Protection And Dependable Service You Require

Specialized Insurance Placement Architects / Engineers Errors and Omissions

PUI AGENCY OF COLORADO, INC. 4949 South Syracuse St. Suite 300 Denver, COLORADO 80237 303-843-0229



BULLISH ON PRECAST



Gordon, Gumeson and Associates, Inc.

Mechanical and Electrical Consulting Engineers

Serving the Rocky Mountain Region

Specializing in all aspects of mechanical and electrical planning and design emphasizing:

System Evaluations = Load Studies = Feasibility
 Lighting Simulations = Project Design = Energy Studies
 Indoor Air Quality = Construction Administration = Sustainable Design

For:

Commercial Buildings
 Medical Facilities

 Computer Facilities
 Laboratories
 Government Facilities
 Schools
 Hospitals
 Universities

7430 East Caley Avenue, Suite 200 Englewood, Colorado 80111 (303) 779-1222 Fax: (303) 694-9144

Architect: Thompson, Ventulett, Stainback & Associates, Inc.

- Total Precast Campus consists of half million square feet of office space and 1000 car curved parking deck.
- Architect blended building into context of native stone with pigmented, acid etched, simulated stone architectural load bearing precast columns and spandrels.



Rocky Mountain Prestress

5801 Pecos Denver, Colorado 80221 303/480-1111 FAX 303/433-0451

DRAWING, from page 8

ing decisions based on which tools and services you have at hand. There's no need to commit to brand-name colored markers if the only art supply store in town doesn't carry them. Instead, focus on alternative methods of coloring your drawings, such as colored pencils. I recently gave a design workshop in a rural town. Since there wasn't any photo service capable of developing color slides locally, I photographed with color print film. I had prints back in an hour, and projected color negatives instead of slides to create drawings. It worked fine!

You're in the drawing seat. Experiment with your own drawing identity. You may have a natural talent for pencil drawing, but never feel comfortable with ink. Try using minimal detail and no color on your next drawing. Practice several different line styles, drawn at different speeds. See what kind of drawing you come up with if you work on it for half a day. Then try it again in half the time. Don't be afraid to make a mistake. Remember to play to your drawing strengths, and develop the parts of the drawing that are the most exciting to you. Have some fun! It's all in your attitude—once you know some DRAWING SHORTCUTS!

Jim Leggitt, AIA is an architect and urban planner with RNL Design in Denver. He has taught many DRAWING SHORTCUTS workshops to design professionals and students. If you are interested in learning more or participating in an upcoming drawing workshop, please call Jim at 303.575.8515.

Design Communication Committee No one ever told me I'd have to sell...

arketing is on the agenda for the design communication communication committee for 1998. We have an exciting program filled with hands-on workshops, which include...
 Marketing Materials & Methods,

- Marketing materials & me
 Cutting-edge "Hollywood"
- 3-D Modeling,
- The Power of PowerPoint,
- Keeping the Pace with the Competition

The committee will focus on enhancing your product by bridging the gap between the young technology filled workforce with the refined drawing skilled workforce. Whether the image is generated by hand or computer, we want to be the AIA's resource on how to do it better. So keep an eye out for a chance to see a laser model cutter or a tour of Quark Xpress' headquarters, or even a visit to Robert Waxman to learn state-of- the art digital cameras.

If you would like to become a member of the Design Communication Committee, please attend our noon brown bag workshops on the third Thursday of each month at the AIA Colorado offices. Questions? Call Ken Cilia, Assoc. AIA at 303.758.8877 or Jim Leggitt, AIA at 303.575.8515.



American Olean Ceramic Tile Crossville Porcelain Stone Natural Stones Weck Glass Block Questech Metals Emil Ceramic Tile Italgraniti Porcelain

Terra Green Recycled Glass Tiles

and much, much more ...

Your Source for:

400 QUIVAS ST. • DENVER, CO 80204 303-446-0780 • FAX 303-446-0781 • **1-800-999-8453**

COBRA AWARDS, from page 9

philosophic request that "the human occupant be the most important design element of each space" and the requirement to respect the tradition of its western circumstance.

Based on the settlement forms of western ranches, the design concept organizes a "gathering" of simple architectural shapes. Interconnected to form an entry court, these shapes recreate the scale of a rural compound. To reinforce the feeling of a protected enclave, the house was sited in a topographic saddle between two knolls, which formed a hanging valley on the southern exposed mountain side.

The plan is organized around three primary functional groupings which in turn are expressed as three distinct roof forms: family living quarters, guest quarters, and garage/caretaker's quarters. To create view and "sun pockets" that illuminate the entry court, and to respond to snow protection needs, the roof forms assume the individualized character of rural buildings evolved over time.

Following another western tradition, the landscape concept creates "oasislike" enrichment within the confines of the compound, but leaves the surrounding natural environment untouched. The entry road from the valley below was "choreographed" to meander through the changing natural

Doing Business in Colorado

IA Colorado is pleased to announce its participation in the Eighth Annual "Doing Business in Colorado" Seminar to be presented by Hall & Evans, L.L.C., in conjunction with AGC/C and American Consulting Engineers Council of Colorado.

The complimentary seminar will be held on Wednesday, February 25, 1998 from 1-6 PM, at the Holiday Inn S.E., I-225 and Parker Road, Aurora, Colorado.

Topics will include: avoiding sexual harassment and other employment claims, highlights of recent changes to AIA contract document A201 and B141, domains of the site while ascending to the house. The ranch like gravel road emerges to the hanging valley location of the house. Reflections of the house in a small mountain pond signal arrival.

The house is designed for outdoor living in both summer and winter. All family spaces open to a series of stone terraces and decks connected by landscape paths, and are oriented to capture views. A south-facing terrace is perched at the lower topographic throat of the saddle to bring the site and the indoor pool activity together and enables sunlight to reach the end of the "grotto-like" lap pool at the lower level.

Materials were chosen to render a quality of permanence to the character of the house. Native stone and heavy timber characterize the building exterior. Antique pine retires to its mountain environment in the form of heavy timber, flooring wall paneling, and millwork; detail is dominant interior material.

Honorable Mention Winners:

David M. Dahman - Architect Aerie at Stonehenge

Charles Cunniffe Architects Snook Residence

Charles Cunniffe Architects Oxley Residence

Charles Cunniffe Architects Ho Residence

new developments in design-build, and an ADA liability update, as well as other timely business issues.

Owners, principals, financial officers, directors of human resources, and project managers should plan to attend. Registration materials was mailed by H&E in January.

Barker•Rinker•Seacat & Partners•Associates•P.C., a local Denver firm, has recently been awarded an Indefinite Quantities Contract with the National Park Services for architectural services throughout the United States and its possessions and territories.



Reach your statewide audience in the new Colorado ARCHITECT

Now in a monthly, integrated format that includes AIA Colorado, AIA Denver, AIA Colorado South, AIA Colorado North, and AIA Colorado West.

NEW SIZES AND RATES FOR ADVERTISING



Call Kelli Davis today for information about discounted rates on your monthly ad in 1998.

303.789.0879

. 10 Colorado Architect



AIA Colorado North Chapter

1998 AIA Colorado North Chapter Board of Directors

PresidentStephen Loos, AIA President-Elect ..Rebecca Spears, AIA TreasurerRandal J. Giseburt, AIA Treasurer-Elect ..Bryan M. King, AIA Secretary.....David Lingle, AIA Past President....Mark Quéripel, AIA DirectorK. David Carson, AIA DirectorJim Cox, AIA DirectorJohn A. Sohl, AIA DirectorJohn A. Sohl, AIA DirectorJ. Erik Hartonft, AIA Assoc. Dir......Shawn Gaither, Assoc. AIA

North Chapter Members Use Computers for Presentation

rchitects are taking advantage of the many possibilities computers offer for presenting design solutions to their clients. Whether striving for photo-realism or including detailed information at a glance, these firms are implementing the computer as a sophisticated tool.



E very now and then an opportunity knocks and if you spot it in time, you just have to immediately jump on it. Such an opportunity occurred about five years ago at an impromptu reunion of the C.U. College of Architecture, Class of '69. Ron Abo, Jim Copeland, and Steve Loos—all classmates—attended and reactivated some 20-year-old friendships. Abo Architects, P.C. of Denver and James D. Copeland Architects, Inc. of Boulder were successful practices started by Ron and Jim soon after graduation. Steve had just returned to



Colorado after some 25 years in practice on the East Coast. One thing led to another, and soon the three classmates were talking about merging their firms to create Abo•Copeland Architecture, Inc. The rest is recent history.

One of the early strengths of the merged firm was the realization of an expanded range of project experience. Ron's firm had worked extensively in urban design, commercial revitalization, historic preservation/renovation, and schools. Jim's firm had become a regional specialist in

laboratory/research and development design and had extensive housing and commercial experience. Steve's experience in the East was in large projects, particularly corporate office and conference facilities, hotels, and retail.

These three were joined by two additional Principals, John Priebe (John graduated from C.U. a year later than the rest) and Danny Cervantes, an experience architectural technician, to complete the firm's core team. The to hands-on direction and development of projects. The vision of Abo•Copeland Architecture, Inc. is to be one of the premier architecture firms in the Rocky Mountain Region.

Currently, Abo•Copeland Architecture, Inc. is enjoying a very diverse collection of projects. They are in construction on the second of a three-building renovation effort for the Higher Education and Advanced Technology Center at Lowry. They are about to begin construction of the firm's fifth new building at the National

Renewable Energy Laboratory. The firm is working with the Denver Urban Renewal Authority and the Mayor's Office of Economic Development on urban design and commercial redevelopment projects in LoDo and the

Federal/Alameda corridors. These projects, along with various residential, commercial and research and development projects (one in Taiwan), have been keeping Abo Copeland jumping.



Of special note, the firm just received the Sustainable Development Design Honor Award in Jefferson County's Design Excellence Awards Program.

Also, Ron Abo is the 1997 recipient of the Martin Luther King Business Social Responsibility Award for his ongoing volunteer work in minority business development. With Ron serving as AIA Colorado President for 1998 and Steve's work as Colorado North Chapter President, Abo•Copeland Architecture, Inc. intends to continue a very active involvement in the AIA . All this along with the recent consolidation of the Denver and Boulder offices into new office space in Denver's Uptown, have served to make 1997 and the prospects for 1998 very exciting.



Interior view of the lobby of a new office facility for Group Publishing located in Loveland, Colorado. This project was completed in 1995.





diversity of interests and experience among this core group has resulted in a very compatible and complementary team. The firm now consists of fourteen people - five licensed architects, six architectural interns, and three administrative staff. This somewhat unorthodox structure works well because of the Principals' commitment

Abo•Copeland Architecture, Inc. looks forward to 1998 with new energy, enthusiasm, and an enhanced ability to get the job done.

 PAGE
 Colorado

 11
 Colorado

Colorado ARCHITECT



Computer rendering by Erik Hartronft, AIA for the Boulder Public Library. Section through the main reading room and stack area shows the clerestory roof configuration used for daylighting.

Image: 3D model constructed in AutoCAD, rendered with AccuRender 2.0



An exterior view of a mixed use development on the edge of "Old Town" Fort Collins, Colorado. This project is nearing completion.



Project:	Community Medical Center
Location:	Lafayette, Colorado
Architect:	Hartronft Associates, PC
Program:	40,000 square foot medical center with urgent care, outpatient surgery suite, and physician's offices
Budget:	\$8.0 million
Image:	3D model constructed in AutoCAD, rendered with AccuRender 2.0



Exterior perspective of an extensive addition to Avery-Parsons Elementary School currently under construction in Buena Vista, Colorado.

OUALIFIED

durable and effective.



CONSULTING ENGINEER Business decisions to hire a consulting engineer always involve a substantial issue that has a direct impact on a business or governmental entity. You rely on engineers to handle problems of design, infrastructure or construction with a resolution that is efficient,

HOW TO SELECT A

Hiring the best engineer for a project is more than a matter of checking references. You want an engineer who thinks practically, but doesn't waste your time and money. You want an engineer who is responsive, and listens to your concerns. Registration at the state level is but one standard. In Colorado, certified consulting

BEST

Hydronic Radiant Systems Just Got Better

Check Out Why The Roth System Is Best For You

A World Leader in Radiant Panel Heating
Complete line of tubing, components & accessories
Radiation crosslinked PEX tubing with and without barrier
25 year warranty on tubing. ISO 9001 Certified factory
Design Manual with simplified charts for all projects

 Labor saving preassembled manifolds already mounted on brackets. Take out of the box. Fasten to the wall. Done! Easy to install controls with color-coded Junction Box
 Competitive pricing, highest quality & service
 BEST Value!

Call Your 1-888-266-7684



Hydronic Radiant Panel Heating Systems For Residential & Commercial Applications

engineers go "beyond registration" to demonstrate their engineering aptitude.

Certified consulting engineers have unique qualifications, because they voluntarily have submitted to a rigid review of their background, experience and expertise. Certified consulting engineers must be involved in continuing education in their specialty, and agree to a strict standard of ethics.

Certainly it is appropriate to ask engineers for references and project experience. In Colorado, it's prudent to probe for "special" qualifications as well, and ask, "Are you a certified consulting engineer?"

Certified Consulting Engineers of Colorado 899 Logan Street, Suite 109 Denver, CO 80203 303-832-2200



12 Colorado Architect

3

4



1998 AIA Colorado West Chapter Board of Directors

President Suzannah Reid, AIA President-Elect.. Skip Doty, AIA Past President.... Shira Geller, AIA

Other Roadside Attractions Ames Monument, Sherman Hill, Wyoming

-Skip Doty, AIA

S everal commentators have recently stated that our culture is entering the Third Industrial Age. This is an era in which the major commodity is the development and exchange of knowledge and systems. It is a combination of the computer and sophisticated communication systems that has brought this revolution forth.

New developments have occurred on a daily basis, which makes it almost impossible to keep up with the cutting edge. It becomes even more fascinating of entrepreneurs to connect all of this open space with someplace else.

During the late 1860's the U.S. government paid for the public works project of building a transcontinental railroad line. The industrialists of the time knew it was important to provide the factories of the East with the natural resources found in the West. Also, there were markets in the West that could be supplied with goods produced in the East. The highest point of the transcontinental railroad is at Sherman Hill (8,247 feet) west of Cheyenne, Wyoming. It is not an imposing summit, but the constant wind makes you feel like it took twice as long as it should have to reach the top. This is a land of sparsely timbered rolling hills capped with granite monoliths. At one time the lonely town of Sherman was located at the summit.

The Union Pacific Railroad Company built the Ames Monument at this summit in 1882 for the cost of \$65,000. The original rail line passed just to the north of this 65-foot high monument. The monument now stands isolated in the landscape because the rail line has been relocated several miles to the south. It was designed by H.N. Richardson as a memorial to the Ames Brothers, who were from North Easton, Massachusetts.

Oakes and Oliver Ames owned companies in Massachusetts that supplied much of the equipment and all of the shovels that Union Pacific used to build the rail line. Both of them passed away several years before this monument was built. The Ames brothers had been the patrons of Richardson. He had designed several buildings for them in Massachusetts.

A visitor can feel Richardson's energetic use of native materials to build this elemental structure. The granite blocks



New Members

Suzanne Allen-Guerra, Assoc. AIA

Hans Berglund, AIA Cottle Graybeal Yaw Architects

Laurie Guluarte, Assoc. AIA Laurie Guluarte Interior Design when one considers that it took several hundred years for the first Industrial Age to begin in the factories of Europe and then mature into a worldwide phenomenon. This age literally originated, developed, and began to mature in our lifetimes.

What holds all of this together is the computer and a vast network of built and unbuilt lines for communications. These lines stretch from the utility easements outside our office to literally the far reaches of space. It is easier to chat with a person in Europe than it is to talk to our neighbors.

The West is not a stranger to this concept of networks for travel and communication. It has always been the goal This railroad line followed the route of the early explorers up the Platte River and then across the desert of Southern Wyoming. It joined the line being built from California in the badlands north of the Great Salt Lake.

The opening of this rail line had an immediate impact on the country. A journey that took six months to complete could now be done in days. It served as the main route which all of the other railroads and roads branched off from. This is now one of the busiest railroad lines in the country. Not only was the country connected, but the great land rush to develop the West had begun. We are still experiencing the effects of these land rushes in Colorado. that were quarried from a nearby outcropping are the size of Volkswagens. In this vast land it is hard to grasp the scale of this monument. It overwhelms you as you stand next to it, but it cannot be seen until you are almost upon it. From a distance it blends into the land. It has been described as Richardson's least known and most perfect work. It is located further west than any of his other works.

In a larger sense this monument serves as a symbol for the opening of the west. The essential form of this obelisk presides over a world of networks the railroad started 130 years ago

 PAGE
 Colorado
 ARCHITECT

Was Victor Hugo Right?

have spent a lot of time recently thinking about computers. Having gone through graduate school when CAD was in its infancy and worked in primarily small firms who were slow to convert to CAD, I was able to do very well for quite a while without a working knowledge of it. Now, however, it seems I can no longer avoid it.

While the computer is an integral part of my office for almost everything, I have been struggling with the decision to get CAD. It is not the terminology that has me concerned, or the number of choices for programs or platforms. The financial investment is of course daunting, but my real concerns are the implications to my thought process and to my product.

The author, Victor Hugo predicted the death of architecture as a result of the invention of the printing press. His rationale was that the purpose of architecture was to communicate with large numbers of people who did not have access to hand written texts, and thereby could not read. The architecture of the time, both religious and secular, filled this role very well. However, with the advent of a widely available written word, buildings would no longer be required to perform this duty, would lose their meaning and therefore their purpose.

Like the printing press, the computer is revolutionary in its implications for the transfer of information. Like any wide reaching invention they both come out of a cultural desire and go on to alter the culture. One might say that they are simply tools, but I would argue that a tool expresses the nature of the product it is used to create, and conversely a product always holds the expression of the tool that was used to create it. For example, a letter created with a quill pen has certain characteristics of the quill evident in the shape and stroke of the letter. A letter printed by a press expresses the idea of mass production and universality. In this example, we know that a human was behind both types of letters, however, the printed

letter only conveys the idea that is contained in the text. It does not convey the subtext of the hand that created the text. This reduction of complexity is at the root of my concern.

Computers take this reduction to the most extreme level, reducing all information to ones and zeros, and by definition, eliminating context. Take for example a digital watch. It only tells us the time, and it does it so well that it is actually more accurate than we are able to be. The analog watch, on the other hand, provides much more information. The watch face relates not only to time, the movement of the sun and moon, but to the cardinal points (north, south, east and west) and to the position of the body in space. You can look at the hands and tell the time without having to actually read the numbers, and you can see the relationship of minutes to hours. The digital information (watch) exists outside of that context.

The problem with all this comes when we alter our thinking to accommodate how the computer wants to think. The digital watch cannot avoid telling us the seconds because that is how it tells the time. The computer demands that we input information in a certain way to allow it to manage that information. This will ultimately affect the way we think and solve problems. And the effect can already be seen in our built environment. Efficiency and standardization drive the design process. I believe that the erosion of our authority, as architects, and homogenization of the built environment are indications of this process.

At the same time, like the printing press, the computer has brought considerable power to the individual. No one will argue the benefits of these inventions. Frank Gehry's new museum in Bilbao could never have been built without the help of computers, and it is a true work of architecture.

We are in a process of evolution. What will architecture be in the digital information age? It is critical that we continue to be broad based, well informed and open thinkers, communicating to our clients that we are more than just CAD operators. In the end, we still have the responsibility to bring all —Suzannah Reid, AIA

those elements of context, human hand, and complexity of understanding to our work, despite the tools we might use to get there.

AIA COLORADO WEST CHAPTER Awards Program

Deadline for Submittals: March 19, 1998. Register Now!

he Colorado West Chapter is accepting submissions for the annual awards program. Although the registration deadline was January 26, binders are not due until March 19th. Call Suzannah Reid, AIA at 970.920.9225, TODAY, if you still want to register. The winners will be announced at the Annual Banquet, tentatively scheduled for April in Aspen.

This year, we've made some changes in the program. The Open Category, which includes Objects, Furniture, and Lighting, was eliminated and will be its own program to be held in the fall. We held the first Objects Competition last September and displayed the entries at the piazzaAIA gallery in Denver. This year, we hope to get a wider variety of submittals, so watch for the postcard and mark your calendars! We are also adding four new categories to the program this year. The new categories will be; Firm of the Year, Architect of the Year, Contribution to the Built Environment, and the 25 Year Award. These categories will be based on the existing ones that are given at the state level each year. We hope that these new categories will keep us aware of the variety of work that is being done in our chapter.

Both the Design Awards and the four new awards will be announced at the Annual Banquet. We hope to be at the Aspen Meadows again this year on April 18th. You will be receiving your invitations shortly.

If you have any questions, feel free to call Suzannah Reid, AIA at 970.920.9225.

Wind2 for Windows 95/NT

Does Your Financial Management Software Really Measure Up?







We not only invented housewrap, WPND, we reinvented it.

New Tyvek Home Wrap offers more:

- 50% better water resistance
- Two times better air resistance
- Superior weatherization protection
- Higher consumer satisfaction

Call to arrange a boxed lunch or to order an Architectural Manual.

> (800) 332-6682 (303) 289-2226

Fax (303) 288-0080

289-2226 or 800-332-6686 **R W Specialties, Inc.** 9000 E. 96th Ave. • Henderson, CO 80640 (800) 332-6682

Tyvek HomeWrap[™] Ask for Dupont Tyvek.

Windows 95 Compatible Compatible

32-bit • Advanced Features • Custom Invoicing/Reporting User-Defined Fields • Comprehensive Budgeting Awarded Microsoft Logos



The Number One Provider of Time/Billing, Project Management, and Accounting Software for the Professional Services Firm

Call 1.800.779.4632 today for a CD demo or visit us at www.wind2.com

PAGE

Colorado ARCHITECT

CONTRACTS, from page 3

B141, Owner-Architect Agreement, historically has been the most widely used design contract for private projects in the United States. New B141 has been redesigned as a three-part modular document, and it is intended to expand architects' services beyond those traditionally included in design contracts.

The revamped format of B141 also is intended to provide more contractual flexibility for owners and architects, while at the same time requiring greater discussion between them on many subjects, which were not addressed in previous contract documents. If a meaningful dialog occurs, then the increased level of interaction required to complete B141 should result in a much better understanding of the parties' expectations and help establish a closer working relationship between owner and architect throughout the entire project.

Other noteworthy changes to B141: Deletion of architect's traditional phases of service. The modular format allows owner and architect to designate a traditional package or create a customized scope of services. This change recognizes that not all professional services are provided in a linear fashion; rather many projects proceed on a fasttrack basis with design professionals working on more than one phase or different segments of the project at the same time. New provisions also define the circumstances in which changes in services entitle architect to an equitable adjustment in compensation. The concepts of contingent and optional additional services have been deleted.

Modification of plans and specifications to meet owner's project budget. The concept of a construction cost

fixed limit has been deleted, but new B141 incorporates the common industry practice which requires architect to modify the plans and specifications as necessary to comply with owner's project budget; provided, architect agrees to owner's budget at the outset of the project and owner's budget is exceeded by the lowest bona fide bid or negotiated proposal obtained for the project.

Waiver of consequential damages. The changes to B141 similarly track the new provisions in A201, resulting in a broad waiver of consequential damages by owner and architect.

Mandatory, nonbinding mediation as a condition precedent to binding arbitration or mechanic's lien litigation. The mediation provisions added to B141 are similar to those contained in new A201, and they preclude the joinder or consolidation of claims by owner against contractor for the mediation process between owner and architect, absent the consent of the parties.

Experienced participants in the construction industry have long recognized the need to tailor the necessary contract documents to fit the unique circumstances of each project. Contract considerations vary greatly from project to project. The AIA set of contract documents provides the benefits associated with decades of use by the construction industry and interpretation by the courts throughout the United States, but they seldom adequately address all the complex issues raised by today's projects. Careful study and comparison of the new contract provisions with prior AIA documents and those published by other recognized industry groups will help establish the much-needed understanding of AIA's new rules for construction projects.

This article by Mr. Commander first appeared in the Colorado Real Estate Journal.

The new AIA contract forms are now available!

CHOICE, from page 1

They are looking for a wide range of residential projects, including:

- Energy efficient
- Sustainable design ٠
- Remodeling
- Historic preservation ٠
- ٠ Lofts
- Multi-family dwellings
- Custom Housing
- Affordable Housing

The judges for the competition will be from the AIA Denver Housing Committee with an invited guest judge. The jurors will be judging on use of scale, creativity, appearance, innovation, responsiveness to program, balance of design solution and cost, sensitivity to context, and good photos! Entry binders and rules may be obtained from the AIA Colorado at 1526 15th Street, Denver, ph. 303.446.2266, fax 303.446.0066. Deadline for the submittals is Monday, March 16, 1998 at 5 PM. Don't miss this amazing opportunity!

CLASSIFIEDS

PHILIP WEGENER KANTOR **PHOTOGRAPHY & VIDEO**

shoots architecture, interiors, and exteriors in all formats: large-4x5, medium format-120 or 35 mm. Any lighting situation or location possible. Call Philip at 303.444.8414. Fax: 444.0242

Featuring the Océ 9800 with **Repro Desk Delivering High Volume Plotting** Copying & Scanning Service

Repro Desk Software: Installed at your office, you do all the job preparation & with a click of the mouse - send the job to Ken's

Total File Compatibility: Including Autocad.DWG, CalComp 906/907, HPGL/HPGI-2, Microstation, DXF, CALS (1 & 2), & **CCITT Group-4 TIFF**

Scan to file: Allows you to build hybrid plot jobs comprised of CAD plot files and scanned originals

Fastest Scanning Speed: 12 D size per minute Many More Money Saving Features

Comprehensive Reprographic Services



Three Océ 9800s • Two HP 750 Color

Plotters Three Canon Laser

Color Copier

DESIGN YOUR FUTURE Van Gilder Insurance Corp. and DPIC Companies, Inc. Specialists in providing comprehensive insurance and loss prevention programs for design professionals 303.837.8500 800.873.8500 COMPANIES Different by Design®

Quality Architectural Precast Concrete



DENVER ARCHITECTURAL PRECAST, INC.

8200 East 96th Avenue Henderson, CO 80640 303.286.7339 / 303.286.7926 (Fax) *1996 ACI Award of Excellence

Architect: Klipp, Colussy, Jenks, Dubois Architects General Contractor:

Mortenson Construction

✓Color CAD Plotting

✓Spec Set Copying

✓Diazo up to 54" Wide

✓Free Pick-up & Delivery



EN'S EPRODUCTIONS LTD.

2220 CURTIS STREET . DENVER, COLORADO 80205 E-MAIL: SALES@KENSREPRO.COM NET: HTTP://WWW.KENSREPRO.COM





Are you fully benefitting from today's cutting edge technology and ever changing business climate – are you considering time, environment, cost and flexibility when designing commercial interior partitions?

Demountable/Relocatable Partitions!!

- 1/3 less time to install than standard fixed drywall
- Environmentally responsible
- Substantial cost savings over fixed drywall construction
- Can be reused as space requirements change for 30% to 60% less than fixed drywall



Vinyl Laminators is a custom manufacturer of commercial demountable partitions based in Colorado. For further information call Charlie Davis at 733-2476.

VINYL LAMINATORS, INC.

APRIL 2 Denver Board meeting,

5:30 PM, AlA offices6 Government AffairsCommitte meeting, 2 - 5PM, AlA offices

15 South Chapter Board

meeting, call AIA for more info at 303.446.2266 16 Design Communications Committee meeting, 12

noon, AIA offices

Bulk Rate U.S. Postage Parmit No. 209 Englewood, CO



FEBRUARY 1998

\$5.00

COMPUTERS IN ARCHITECTURE ISSUE

Architect of the Year 1997– William R. Deno, AIA

The first public sector architect to receive The Architect of the Year Award is William R. Deno, AIA. Mr. Deno has played an extremely crucial part in the Boulder campus' reputation for outstanding beauty. For more than 24 years, Bill has been involved with facilities planning and design on the Boulder campus and has directly managed the design of all construction activity since 1984. Stephen Loos, AIA, 1998 AIA Colorado North Chapter President, said Deno was nominated by the North Chapter and selected for "his commitment to excellence in the campus environment." Congratulations!





	5	
	H	
	Z	
	[1]	
	>	
1	T	
	R	
	~	
	2	
	Z	
	[I]	
	H	
1		

FEBRUARY

- 5 Denver Board meeting,5:30 PM, AIA offices
- 10 Architect's Roundtable,5:30 PM, AIA offices
- 13 Government Affairs Committe meeting, 2-5 PM, AIA offices
- 17 Housung Committee meeting, 7:30 AM, AIA offices
- 17 North Chapter Board meeting, call AIA for more info at 303.446.2266
- 18 South Chapter Board meeting, call AIA for more info at 303.446.2266
- 19 Design Communications Committee meeting, noon, AIA offices
- 20 Colorado Editorial Board meeting, 11 AM - noon, AlA offices
 - 20 Colorado Finance Committee, 1-2 PM, AIA offices
- 20 Colorado Board meeting,2 PM, AIA offices

MARCH

- 5 Denver Board meeting,5:30 PM, AIA offices
- 12 Juvenile Justice SystemPIA reception, 6:30 PM,Lookout MountainDetention Facility
- 12-13 Juvenile Justice System: Change As a Constant, PIA Conference
 - [3 Government Affairs Committe meeting, 2 - 5 PM, AIA offices
- 17 North Chapter Board meeting, call AIA for more info at 303.446.2266
- 18 South Chapter Board meeting, call AIA for more info at 303.446.2266
- 19 Design Communications Committee meeting, 12 noon, AIA offices
- 20 Colorado Editorial Board meeting, 11 AM - noon, AIA offices
- 20 Col. Finance Committee, 1-2 PM, AIA offices
- 20 Colorado Board meeting,2 PM, AIA offices

Colorado Architect 1526 15th Street Denver, CO 80202

The Colorado Architect is provided to members as a member estrvice; subscriptions are available to non-members for \$60

SUBSCRIBE TO THE COLORADO ARCHITECT

NAME		
COMPANY		
ADDRESS		
ALL	STATE	ZIP
HONE	PAX	
LETHOD OF PAYMENT. CHECK	D MC	NISA 🔲
VUMBER		EXB. DATE